

KOPYLOVA, M. (Riga)

Vaccination of adults against tuberculosis. Vestis Latv ak no.1:  
131-134 '61. (EEAI 10:9)

1. Akademiya nauk Latvyskoy SSR, Institut eksperimental'noy i  
klinicheskoy meditsiny.

(VACCINES AND VACCINATION) (TUBERCULOSIS)

KOPYLOVA, M.

Some data on the state of tuberculous infection among the population. Vestis Latv ak no.6:107-114 '62.

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KOPYLOVA, M.K.

Variability in the tuberculin reactions of vaccinated and revaccinated schoolchildren, adolescents, and adults. Vestis Latv ak no.7:111-114 '62.

1. Institut eksperimental'noy i klinicheskoy meditsiny AN Latvyskoy SSR.

KOPYLOVA, Margarita Konstantinovna; ROZENBERGA, R., red.; OZOLINA, A.,  
tekh. red.

[Pneumonia in infants] Plausu karsonis mazbernu vecuma. Riga,  
Latvijas PSR Zinatnu akademijas izdevnieciba, 1962. 25 p.  
(MIRA 16:5)

(PNEUMONIA) (INFANTS--DISEASES)

SOKOLOV, I.Yu.; AYDIN'YAN, N.Kh.; BELEKHOVA, V.N.; BRODSKIY, A.A., starshiy nauchnyy sotrudnik; GLEBOVICH, T.A.; DALMATOVA, T.V.; KOMAROVA, A.I.; KOMAROVA, Z.V.; KOPYLOVA, M.M.; KUDRYAVTSEVA, M.M.; LIBINA, R.I.; LOGINOVA, L.G.; MARGOLIN, L.S.; MARKOVA, A.I.; MEDVEDEV, Yu.L.; MILLER, A.D.; MULIKOVSKAYA, Ye.P.; NECHAYEVA, A.A.; OZEROVA, N.V.; PALKINA, I.M.; PETROPAVLOVSKAYA, L.A.; POPOVA, T.P.; REZNIKOV, A.A.; SERGEYEV, Ye.A.; SETKINA, O.N.; STEPANOV, P.A.; SUVOROVA, Ye.G. [deceased]; SHERGINA, Yu.P.; PANOVA, A.I., red.izd-va; IVANOVA, A.G., tekhn.red.

[Methodological handbook on the determination of microcomponents in natural waters during prospecting for ore deposits] Metodicheskoe rukovodstvo po opredeleniiu mikrokomponentov v prirodnykh vodakh pri poiskakh rudnykh mestorozhdenii. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane neдр, 1961. 287 p.

(MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii (for Sokolov, Brodskiy, Glebovich, Ozerova, Kudryavtseva, Loginova, Markova, Medvedev, Belekhoval, Palkina,

(Continued on next card)

SOKOLOV, I.Yu.—(continued) Card 2.

Popova, Petropavlovskaya). 2. Institut geologii rudnykh mesto-  
rozhdeniy, petrografii, mineralogii i geokhimii AN SSSR (for  
Aydin'yan). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut  
metodiki i tekhniki razvedki (for Miller, Sergeyev, Margolin).  
4. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut  
(for Mulikovskaya, Reznikov). 5. Vsesoyuznyy nauchno-issledova-  
tel'skiy institut mineral'nogo syr'ya (for Komarova, A.).  
(Prospecting—Geophysical methods)  
(Water, Underground—Analysis)

KOPYLOVA, M.N., Cand Pharm Sci— (disc) " <sup>Preparation of</sup> ~~obtaining~~ iodide ~~of~~ potassium  
from iodine by <sup>the use of</sup> ~~using~~ sulfurous anhydride as a reducing agent."

Tbilisi, 1958. 15 pp (Tbilisi State Med Inst), 200 copies (KL, 44-58,126)

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CA

KOPYLOVA, N. A.

VO

**Rationalization of the production of ascorbic acid (vitamin C).** I. T. Strukov and N. A. Kopylova. *Farmatsiya* 10, No. 3, 8-12 (1947); *Chem. Zentr.* (Russian Zone Ed.) 1948, I, 135; cf. U.S.S.R. 67,505 (C.A. 42, 7014c).—The tech. method for the production of ascorbic acid (I) according to Reichstein (U.S. 2,265,121, C.A. 36, 1739<sup>b</sup>) follows the scheme: D-glucose → D-sorbitol → L-sorbose → diacetonesorbose (II) → diacetone-2-ketogulonic acid (III). The various steps were improved so that it was possible to obtain 1 kg. I from 2 kg. of sorbose instead of the 4 kg. ordinarily required. The following improved method for the formation of II is reported: To 50 g. finely powd. sorbose (92.5%) and 700 cc. Me<sub>2</sub>CO at 20-25° stirred continuously is added 28 cc. H<sub>2</sub>SO<sub>4</sub>·H<sub>2</sub>O over a period of 20 min., the mixt. then cooled to 0-2°, another 14 cc. of H<sub>2</sub>SO<sub>4</sub> added, the cold mixt. then added slowly (over a period of 2 hrs.) to 550 g. of 12% NaOH

soln. (kept stirred and cooled to 5-10°), the Me<sub>2</sub>CO distd. off, the II extd. from the residue with C<sub>2</sub>H<sub>5</sub>Cl (250 cc., 4 extrs.), 200 cc. of the solvent distd. off, first under normal pressure and later in vacuo, 100 cc. water is added to the light yellow liquid, and the vacuum distn. continued. The II remaining in the flask crystallizes readily; yield, 56 g. (83.8%). The following improved method is given for the prepn. of III: To 50 g. II, 300 cc. water, and 25 cc. of 50% KOH at 31-45°, stirred continuously, 60 g. K manganate is added in small portions over a period of 1 hr., the excess oxidizing agent decompd. by the addn. of 25 cc. alc., the MnO<sub>2</sub> filtered off, the soln. cooled to 0°, III pptd. by the gradual addn. of concd. HCl, and the product washed with ice water and dried at 25-40°; yield 51 g. (81.1%). The total yield of III, calcd. on the sorbose, was 69%. Tech. I is frequently contaminated with 2-ketogulonic acid  $\gamma$ -lactone (IV), which can be detd. by suitable titration. Both compds. can be titrated with 0.1 N NaOH. When the mixt. is titrated with 0.1 N iodine, I is converted into dehydroascorbic acid while IV remains unchanged.  
M. G. Moore



KOPYLOVA, N. A.

Spasmodic tendency. M. D. Moshchinskii, M. V. Khokhlov

sov. S. S. Liberman, N. A. Kopylova, and L. P. Kopylova  
skaya. U.S.S.R. 168,504, May 28, 1977. Also in  
Hydrochloride of 3-diethylaminoethyl...  
propionic acid is used. M. D. Moshchinskii

KOPYLOVA, N.A.

Production of methylhydrobenzoin. Med. prom. 15 no.3:38-39 M  
'61. (MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy  
institut imeni S.Ordzhonikidze.  
(HYDROBENZOIN)

*Kopylova, O.A.*

KHRUSTSELEVSKIY, V.P.; GORODETSKAYA, T.A.; KOPYLOVA, O.A.

Materials on the ecology of the Brandt's vole (*Phaiomys Brandti*  
Radde). *Izv. Irk.gos.protivochum. inst.* 10:54-75 '52. (MIRA 10:12)  
(TRANSBAIKALIA--FIELD MICE)  
(ANIMALS, HABITATIONS OF) (ANIMALS, FOOD HABITS OF)

ZHOVTTY, I.P.; KOPYLOVA, O.A.; SYCHEVSKIY, P.T.; TIMOFEYeva, A.A.;  
MAKSIMOVA, Ye.D.

Parasitological work in the sanitary protection of state  
frontiers. Izv.Irk.gos.nauch.-issl.protivochum.inst. 15:  
249-257 '57. (MIRA 13:7)  
(SIBERIA, EASTERN--INSECTS AS CARRIERS OF DISEASE)

ZHOVYY, I.F.; KOPYLOVA, O.A. .

Fleas of the Daurian pika during the period of the massive growth  
of their numbers. Izv.Irk.ges.nauch.-issl.protivozhum.inst. 15:  
293-298 '57. (MIRA 13:7)

(TRANSBAIKALIA--FLEAS)

(PARASITES--PIKAS)

KHRUSTSELEVSKIY, V.P.; KOPYLOVA, O.A.

Materials on the ecology of Brand's field mouse; Report No.5:  
Peculiarities of seasonal and diurnal activity. Izv.Irk.gos.  
nauch.-issl.protiwochum.inst. 16:69-77 '57. (MIRA 13:7)  
(TRANSBAIKALIA--FIELD MICE)

KOPYLOVA, O.A.

Comparative evaluation of the effectiveness of some methods of  
collecting fleas from the entrances of rodent burrows. Isv.  
Irk.gos.nauch.-issl.protivechum.inst. 16:217-223 '57.

(MIRA 13:7)

(INSECTS--COLLECTION AND PRESERVATION)

ZHOVTYY, I.F.; YEMEL'YANOVA, N.D.; KOPYLOVA, O.A.; PROKOP'YEV, V.N.

Materials for a study of the trombiculid mites (Trombiculidae  
ewing) of Transbaikalia. Izv.Irk.gos.nauch.-issl.prirodozn.  
inst. 17:219-226 '58. (MIRA 13:7)  
(TRANSBAIKALIA--MITES)



1. KOPYLOVA, E. Ye. and MONASTYRSKAYA, B. I.
2. USSR (600)
4. Pneumonia
7. Significance of bronchial obstruction and atelectasis in the development of pneumonia, Arkhiv pat. 14 No. 5, 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

*RZHBiol., T. 19.*

Country : USSR  
Category : Human and Animal Physiology. Respiration

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Abs Jour: RZHBiol., No 19, 1958, 88888

Author : Kopylova, R. Ye.

Inst : -

Title : The Regulation of Intrapleural Pressure and the  
Pleuro-Pulmonary Reflex in Experimental Pleurisy.

Orig Pub: Patol. fiziologiya i eksperim. terapiya, 1957,  
1, No 3, 56-60

Abstract: A kymographic recording of intrapleural pressure  
(IPP) and of the pleuro-pulmonary reflex (PPR) was  
carried out on 48 rabbits prior to and following  
introduction into the pleural cavity of isotonic  
(I) and hypertonic solutions of NaCl (II), and also  
of turpentine. Following the injection of 10 ml

Card : 1/3

*Chair of Pathological Physiology  
Leningrad Sanitary-Hygienic  
T-52 Medical Inst.*

Country : USSR  
Category : Human and Animal Physiology. Respiration

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Abs Jour: RZHBiol., No 19, 1958, 88888

of II, the IPP failed to change or to increase.  
A pronounced PPR (marked lowering of the pressure  
immediately following the introduction of the solu-  
tion) was noted in 6 out of 21 experiments. Within  
4 hours the volume of fluid in the cavity increased  
from 17 to 42 ml. Following the administration of  
10 ml of I the IPP increased insignificantly, and  
the PPR was not noted. The administration of 50 ml  
of I caused a sharp increase of IPP with following  
normalization. After the administration of 0.6 ml  
of turpentine, the IPP remained frequently unchanged,  
but with development of inflammation (within 2-3  
days) it increased markedly. A fall of IPP was  
more often observed on the opposite side. The author

Card : 2/3

KOPYLOVA, T.N.

Origin of breccias on the contact of the Khatyspyt and  
Tukukut series in the Olenek highland of the Siberian  
Platform. Uch. zap. NIIGA. Reg. geol. no.4:218-221 '64.  
(MIRA 18:12)

KOPYLOVA, T.N.

Chemical composition of bitumens of Permian and Cambrian sediments  
in the Olenek uplift. Trudy NIIGA 121:103-109 '62. (MIRA 15:9)  
(Olenek Valley--Bitumen--Analysis)

KONYLOVA, T.Y.

Effect of aminazine on the functional state of the brain in  
mental illness. Nerv. sist. no.4:140-143 '69 (MIRA 18:1)

1. Leningradskaya psikhiatricheskaya bol'nitsa.

KOPYLOVA, V.

Changing the certification procedure. Prof.-tekh. obr. 22  
no. 12:29 D '65 (MIRA 19:1)

OL'SHANOVA, K., prof.; KOPYLOVA, V., kand.khim.nauk; BAT-OCHIR, A., inzh.

Chromatographic method for determining chloride content in meat.  
Mias. ind. SSSR 29 no.5:51-53 '58. (MIRA 11:10)

1. Moskovskiy tekhnologicheskii institut myasnoy i molochnoy  
promyshlennosti.  
(Meat--Analysis) (Chlorides--Analysis)

KOPYLOVA, V. D.

C.A. V-48  
Jan 10, 1954  
Biological  
Chemistry

Catalase of bull erythrocytes. N. B. Dronov and V. D. Kopylova. *Doklady Akad. Nauk S.S.S.R.* 92, 135-7 (1953).—Erit. of the erythrocytes with  $H_2O-CHCl_3$  with 5-6 days at 5° being a "storage" period, followed, by addn. of Na-K phosphates to bring pH to 7.0, centrifuging, and shaking with  $CHCl_3$  gave a supernatant soln. contg. the catalase. This can be kept as long as 4 months at 5°. The prepn. is protein-free and on dialysis the activity passes into the aq. side of the membrane. Hence the present catalase is not a protein. The enzyme has max. activity at pH 7.4 and is but slightly inhibited even at 63°.  $H_2NOH$  inhibits its action very effectively at  $10^{-4}$  concn. Thionin does not inhibit the enzyme. G. M. K.



NOBYLOVA, K. D.

Precipitation chromatography 7

A chromatogram showing the separation of components in a mixture. The x-axis represents the retention time, and the y-axis represents the intensity of the signal. The chromatogram shows several distinct peaks, indicating the presence of multiple components in the sample.

*Kopylova, V. D.*

USSR/Physical Chemistry - Surface Phenomena. Adsorption. Chromatography. Ion Exchange, B-13

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 593

Author: Kopylova, V. D.

Institution: Moscow Technological Institute of the Meat and Dairy Industry

Title: The Application of Radiochromatographic Methods to the Investigation of Deposition Chromatograms

Original

Periodical: Tr. Mosk. tekhnol. in-ta myas. i moloch. prom-sti, 1956, Vol 6, 170-179

Abstract: The chromatographic separation  $Pb^{2+}$  and  $Fe^{3+}$  from solutions of their salts, based on the formation of deposits after washing the chromatograms formed on columns of anhydrous  $Al_2O_3$ , permutite, discoloring clay, or sulfocarbonate with phosphate buffer, has been investigated.  $P^{32}$ ,  $Ca^{45}$ , and  $Fe^{59}$  were used as radioactive indicators. The best results were obtained with a  $Al_2O_3$  column; however, full separation of the bands could not be achieved. The conclusion is drawn that a number of factors affect the formation of the bands; among these factors

Card 1/2

KOPYLOVA, V.D.

~~PERSONAL INFORMATION~~

~~NAME~~

~~DATE OF BIRTH~~

~~PLACE OF BIRTH~~

~~EDUCATION~~

~~OCCUPATION~~

~~RELIGION~~

~~POLITICAL AFFILIATION~~

~~ACTIVITIES~~

~~REMARKS~~

17th

KOPYLOVA, V. D., Cand Chem Sci -- (diss) "Precipitation Chroma-  
tography of inorganic ions. Mos, 1958. 14 pp. (Mos Order of  
Lenin Chem-Technol Inst im D. I. Mendeleev), 110 copies. ~~etc.~~  
(KL, 9-58,113)

- 17 -

5(4), 5(2)

AUTHORS:

Kopylova, V. D., Ol'shanova, K. M.

SOV/153-58-3-8/30

TITLE:

~~On the Influence Exerted~~ by the Composition of the Solution  
Upon the Formation of Precipitation Chromatograms  
(Vliyaniye sostava rastvora na obrazovaniye osadochnykh  
khromatogramm)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 3, pp 46 - 51 (USSR)

ABSTRACT:

The separation of substances in precipitation chromatograms occurs in consequence of several repetitions of the principal process of precipitate formation and dissolution. A chromatogram is thus formed: The zone localization in it is determined by the product of the ion activity of the resulting precipitates (Refs 1,2). To make clear the question of the separability of two substances by means of precipitation chromatography and to choose optimum separation conditions the ratio of the concentrations of the substances to be chromatographed must be computed at the time of the easier soluble precipitate. The

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On the Influence Exerted by the Composition of the Solution  
Upon the Formation of Precipitation Chromatograms

SOV/153-58-3-8/30

computation can be performed in a general way according to equation (2); but it can be considerably simplified if instead of the ion activity their molar concentrations are used. In general, the resulting precipitate is rendered impure by co-precipitated substances. Under conditions of the precipitation chromatographic column the effect of some co-precipitation processes can be reduced practically to zero; others, however, may increase their influence. The quantity of the co-precipitated admixtures and the character of the process as well as the completeness of the zone separation in the chromatograms depend on the composition and microstructure of the precipitate, on the composition of the solution to be chromatographed as well as on the concentrations of the ions contained in it, finally on the quantity of the precipitant in the column. It is most probably due to these factors that a frequent incomplete or a completely suppressed separation of zones, even in the case

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On the Influence Exerted by the Composition of the Solution  
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SCV/111-18-1-8/35

of precipitates the solubility of which is considerably deviating from one another. It is the aim of the present paper to make clear under which conditions the most complete separation of zones can be attained. The experiment was carried out both with and without radioactive indicators. The cations investigated: hydroxides:  $\text{Fe}^{3+}$ ,  $\text{Fe}^{2+}$ ,  $\text{Cr}^{3+}$ ,  $\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Mn}^{2+}$  and  $\text{Ag}^{+}$ ; phosphates:  $\text{Fe}^{3+}$ ,  $\text{Fe}^{2+}$ ,  $\text{Cr}^{3+}$ ,  $\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Mn}^{2+}$  and  $\text{Zn}^{2+}$ ; iodides:  $\text{Hg}^{2+}$ ,  $\text{Hg}_2^{2+}$ ,  $\text{As}^{+}$ ,  $\text{Pb}^{2+}$  are presented in a table. It can be seen from the table that the clearness of the precipitation chromatogram increases with decreasing solubility of the precipitates at the same concentration of the ion to be chromatographed. This concerns experiments without radioactive indicators. A good separation is observed if the respective solubilities are deviating considerably from each other. For hydroxides, for instance, the difference must be the 100-fold.

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Upon the Formation of Precipitation Chromatograms

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Otherwise no zone separation at all or only a partial one takes place. The use of radioisotopes has shown that a visual zone separation in chromatograms is by no means indicative of their absolute separation. This is due to the contamination by co-precipitation of other ions contained in the solution. An absolute separation is never attained, not even if sharp edges can be seen. In all cases the upper zones contain impurities of other ions which yield easier soluble precipitates. The length of the zones and the intensity of their coloration increases with the increasing concentration of the solution to be chromatographed. The increase in the concentration of the hydrogen ions (pH) causes, in general, a lengthening of the zones, but reduces the clearness of them (Fig 3). The chromatograms are thus shifted downwards in the column (Fig 3, curves 2 and 3) and become indistinct. The authors try to explain these phenomena. There are

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On the Influence Exerted by the Composition of the Solution  
Upon the Formation of Precipitation Chromatograms

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3 figures, 1 table and 5 Soviet references.

ASSOCIATION: Moskovskiy tekhnologicheskii institut myasnoy i  
molochnoy promyshlennosti (Moscow Technological  
Institute of ~~Dairy~~ and ~~Meat~~ Industry) Kafedra ana-  
liticheskoy khimii (Chair of Analytical Chemistry)

SUBMITTED: September 19, 1957

Card 5/5

AUTHORS: Kopylova, V.D., Ol'shanova, E.M. SOV-69-58-4-9/18

TITLE: Secondary Phenomena in Precipitation Chromatograms of Various Compounds (Vtorichnyye yavleniya v osadochnykh khromatogram-makh razlichnykh soyedineniy)

PERIODICAL: Kolloidnyy zhurnal, 1958, Vol XX, Nr 4, pp 456-460 (USSR)

ABSTRACT: In the precipitation chromatography, more often than in other forms of chromatographic analysis, a change of chromatograms with time takes place. These changes consist of the smoothening of the zone boundaries, the formation of new zones, the downward movement of the zones, etc. In order to study the laws of these changes in the article, the secondary effects in precipitation chromatograms of phosphates, chromates, hydroxides of various cations, etc. were investigated. In several of the experiments radioactive indicators were applied in a chlor-vinyl pipe, either in the precipitating substance or in the chromatographed solution. The ratio between isotopic material and the dry matter in which it was contained was then determined. The most characteristic changes in the precipitation chromatograms were the following: smoothing of the zone boundaries; increase of the initial length of the zone; change of the color of the chromatogram due to different oxidation and reduction

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SOV-69-58-4-9/18

Secondary Phenomena in Precipitation Chromatograms of Various Compounds

reactions. Experimental results show that with an increase in the concentration of the precipitating agent, the speed of the change of the zone length decreases, the speed of boundary smoothening decreases also, but the speed of color change increases. An increase of the concentration of the chromatographed solution causes an increase of the speed of boundary smoothening, and of the speed of zone length change. An increase of temperature leads to an increase of the speed of change in the precipitation chromatograms. The radioactive isotopes  $P^{32}$ ,  $Co^{60}$ ,  $Fe^{59}$ ,  $Hg^{203}$  were used in the investigation. An analysis of the results indicates that the distribution of the chromatographed ion and of the precipitating agent changes with time. The change of the distribution of the precipitating agent in the column consists in an upward movement in the column. The concentration of the chromatographed ion in the zone decreases with time, which leads to an increase of the length of the initial zone. The smoothening of boundaries and the increase of zone length is explained by the diffusion of the chromatographed ion. The investigation permits the explanation of the secondary effects in many cases as well as

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SOV-69-58-4-9/18

Secondary Phenomena in Precipitation Chromatograms of Various Compounds

the regulation of these processes by changing the conditions causing the secondary effects. The results may also be used for explaining secondary effects in molecular and ion exchange chromatograms.

There are 3 diagrams and 2 Soviet references.

ASSOCIATION: Moskovskiy tekhnologicheskii institut myasnoy i molochnoy promyshlennosti (Moscow Technological Institute of the Meat and Milk Industry)

SUBMITTED: February 25, 1957  
1. Chromatographic analysis--Theory

Card 3/3

5(2), (3)

PHASE I BOOK EXPLOITATION

SOV/2554

Academy of Sciences, Otdeleniye khimicheskikh nauk. Kemiya po khromatografii

Izvedeniya v oblasti ionobmennoy, raspredelitel'noy i obochnoy khromatografii (Studies in the Field of Ion Exchange, Distribution and Precipitation Chromatography) Moscow, Izdatel'stvo Khimii, 1959. 150 p. Errata slip inserted. 3,900 copies printed.

Ed. of Publishing House: M.G. Yegorov; Tech. Ed.: I.M. Oshova; Editorial Board: L.V. Chumak, V.I. Shvachkin, Professor; L.M. Ol'shanova, Professor; L.M. Saldadze, Docent, and M.M. Tunitzkiy, Professor.

PURPOSE: This book is intended for chemists and chemical engineers.

COVERAGE: The book discusses studies in ion-exchange, distribution, and precipitation chromatography. Various problems of the theory of chromatography and its application are also considered. This is the 4th collection of articles published by the Committee on Chromatography. The first collection was published in 1953 under the title: "Izvedeniya v oblasti khromatografii" (Studies in the Field of Chromatography); the second in 1955 under the title "Izvedeniya v oblasti ionobmennoy khromatografii" (Studies in the Field of Ion-Exchange Chromatography); the third in 1957 under the title "Izvedeniya v oblasti ionobmennoy khromatografii" (Studies in the Field of Ion-Exchange Chromatography). No personalities are mentioned. References are given after most of the articles.

Davidov, A.T. and G.M. Viktorin. Study of the Sorption Value and the Exchange Energy of Cations on Wofatite With Relation to Temperature

Bachinskiy, I.Y. Theory of the Stationary Front of Dynamic Sorption

Saldadze, L.M., and Ye. M. Fedotova. Effect of the Ionite Structure on the Ion Exchange Process

Saldadze, L.M., and Ye. A. Shvachina. Kinetics of Cation Exchange Processes on Carboxylic Cationites

Sht, L.N., and P.M. Shvachkin. Purification of Salts With the Aid of an Ion-exchange Counterflow Installation

Pedovskiy, O.P., M.M. Tunitzkiy, and Ye. P. Chernaya. Study of the Kinetics of Complete Cation Exchange on Sulfonated Resins

Chernaya, Ye. P., A. B. Pashkov, S.M. Barabanov, and M.M. Tunitzkiy. Change in the Selectivity of Strongly Acidic Monofunctional Cationites in Relation to the Concentration of Sulfo Groups and Interchain Bonds in Cationites

Pedovskiy, O.P., Ye. P. Chernaya, and M.M. Tunitzkiy. Study of the Diffusion of Ions Through a Cationite Membrane

Shvachkin, P.M. Organic Reagents Used in Adsorption and Distribution Chromatography, Their Classification, and Trends of Investigation

Mitselovskiy, M.N., and Z.M. Shvachkina. Some New Phenomena Which Accompany the Process of Electromigration of Organic Substances

Polyanakiy, M.G. Study of Thermal Desulfonation of Sulfonated Phenolformaldehyde Resin KU-1

Kopylov, V.D., and L.M. Ol'shanova. Precipitation Chromatography

Kopylov, V.D., and L.M. Ol'shanova. Secondary Phenomena in Precipitation Chromatography

Ol'shanova, L.M., and M.M. Moresova. Determination of Calcium by the Precipitation Chromatography Method With the Indicator Murexide

Ol'shanova, L.M., and Z.A. Kolosova. Ion-exchange Paper Chromatography in Qualitative Analysis

Orlovskiy, M.V. Chromatographic Method of Qualitative Analysis for Pur Dyes

Saldadze, L.M., L.M. Ol'shanova, and I.I. Ivanova. Sorption of Mineral Acids and of Their Salts on Cationites

Gorbacheva, M.A., and L.M. Saldadze. Absorption of Complex Zinc Anions on Ionites With Different Basicity

KOPYLOVA, V.D.; MOROZOVA, N.M.; OL'SHANOVA, K.M.

Organic reagents as indicators in precipitation chromatograms.

Izv.vys.ucheb.zav.; khim.i khim.tekh. 5 no.1:22-25 '62.

(MIRA 15:4)

1. Moskovskiy tekhnologicheskii institut myasnoy i molochnoy  
promyshlennosti, kafedra neorganicheskoy i analiticheskoy khimii.  
(Chromatographic analysis) (Chemical tests and reagents)

OL'SHANOVA, K.M.; KOPYLOVA, V.D.; MOROZOVA, N.M.

Determination of the concentration of inorganic ions from the  
zone length or volume in precipitation chromatograms. Izv.vys.  
ucheb.zav.; khim.i khim.tekh. 4 no.6:923-927 '61. (MIRA 15:3)

1. Moskovskiy tekhnologicheskoy institut myasnoy i molochnoy  
promyshlennosti, kafedra neorganicheskoy i analiticheskoy khimii.  
(Chromatographic analysis)

S/032/63/029/001/003/022  
B101/B186

AUTHORS: Ol'shanova, K. M., Morozova, N. M., and Kopylova, V. D.

TITLE: Determination of microamounts of inorganic ions

PERIODICAL: Zavodskaya laboratoriya, v. 29, no. 1, 1963, 24 - 26

TEXT: The limiting concentration at which an inorganic ion ceases to give a chromatographic color reaction is determined. Next, the solution under investigation is diluted until the element concerned gives no reaction. The concentration of the element in the sample is calculated from the required degree of dilution and the known limiting concentration. A glass column 10-13 cm long and of 4-5 mm diameter filled with  $Al_2O_3$  is used.

The following elements, developers for the chromatogram, and limiting concentrations (mg-equ/liter) are given: Cu(II), rubeanic acid,  $4.7 \cdot 10^{-2}$ ; Ni, rubeanic acid,  $7.3 \cdot 10^{-3}$ ; Ni, dimethyl glyoxime,  $1.1 \cdot 10^{-3}$ ; Fe(III), potassium ferrocyanide,  $3.8 \cdot 10^{-3}$ ; Ag, potassium chromate,  $9.2 \cdot 10^{-2}$ ; Hg(II), potassium chromate,  $7.6 \cdot 10^{-2}$ ; Zn, ammonium tetrathiocyano mercurate in the Card 1/2



OL'SHANOVA, Kaleriya Maksimovna; KOPYLOVA, Valentina Dmitriyevna;  
MOROZOVA, Nadezhda Mikhaylovna; CHMUTOV, K.V., otv. red.;  
VLASOV, L.G., red.; MAKOGONOVA, I.A., tekhn. red.

[Precipitation chromatography] Osadochnaia khromatografiia.  
Moskva, Izd-vo Akad.nauk SSSR, 1963. 103 p. (MIRA 16:2)

1. Chlen-korrespondent Akademii nauk SSSR (for Chmutov).  
(Chromatographic analysis)

OL'SHANOVA, K.M.; MOROZOVA, N.M.; KOPYLOVA, V.D.

Determination of microquantities of inorganic ions. Zav.lab.  
29 no.1:24-26 '63. (MIRA 16:2)

1. Moskovskiy tekhnologicheskii institut myasnoy i molechnoy  
promyshlennosti.

(Chromatographic analysis)

OL'SHANOVA, Kaleriya Maksimovna; POTAPOVA, Mariya Aleksandrovna;  
KOPYLOVA, Valentina Dmitriyevna; MOROZOVA, Nadezhda  
Mikhaylovna; DEBABOV, V.G., red.

[Manual on ion-exchange, partition, and precipitation  
chromatography] Rukovodstvo po ionoobmennoi, raspredeli-  
tel'noi i osadochnoi khromatografii. Moskva, Khimiia,  
1965. 199 p. (MIRA 18:7)

KOTLOVA, V.O.; NAZAROV, P.I.

Determination of free aluminum in aluminides. Zhur. anal. khim.  
20 no.7:892-893 '65. (MIRA 18:9)

1. Institut problem materialovedeniya AN UkrSSR, Kiev.

*Kopylova, V.P.*

AID Nr. 983-9 5 June

CORROSION RESISTANCE OF SINTERED Cr-Ni STEELS (USSR)

Andriyevskiy, R. A., and V. P. Kopylova. Poroshkovaya metallurgiya, no. 2, Mar-Apr 1963, 49-54. S/226/63/000/002/007/014

The Institute of Powder Metallurgy and Special Alloys of the Ukrainian Academy of Sciences has studied the corrosion resistance of sintered Cr-Ni stainless steels X17H2 [AISI 431] (2% Ni, 0.15% Si), X23H18 [AISI 310], 1X18H9T [AISI 321], and 0X18H9 [AISI 302]. Test specimens 5 x 7 x 40 mm with a residual porosity of  $38 \pm 1\%$  were prepared by cold compacting and sintering at 1200°C for 2 hrs in a hydrogen atmosphere. The corrosive media were 10%, 50%, and concentrated HNO<sub>3</sub>, 10% H<sub>2</sub>SO<sub>4</sub>, 10% NaOH, and tap water. The changes in electric resistivity of specimens and the amount of dissolved iron were the criteria of corrosion resistance. Results showed the austenitic X23H18 steel to be the most corrosion resistant. The 1X18H9T steel had the least resistance, probably because of the presence of Ti, which makes the steel extremely sensitive to the moisture content in hydrogen.

Card 1/2

AID Nr. 983-9 5 June

CORROSION RESISTANCE [Cont'd]

S/226/63/000/002/007/014

The X17H2 and OX18H9 steels were about equally corrosion resistant, except in 10%  $H_2SO_4$ , in which the X17H2 disintegrated completely after a 5-hr test. In NaOH and  $HNO_3$  all tested steels were passivated; corrosion rate was low. The corrosion rate was also low in tap water. In general, the corrosion behavior of the porous stainless steels studied was similar to that of cast steels. The shear strength of all steels after 2000-hr corrosion tests decreased, especially those tested in 10% and concentrated  $HNO_3$ . The 10% NaOH and water did not substantially affect shear strength, except that of 1X19H9T steel, whose initial shear strength of 18 kg/mm<sup>2</sup> dropped to 11.5 and 10.5 kg/mm<sup>2</sup> after tests in 10% NaOH and water, respectively. Specimens tested in 10%  $H_2SO_4$  disintegrated after a 500-1000-hr test. [MS]

Card 2/2

S/032/63/029/003/007/020  
B117/B186

AUTHORS: Nazarchuk, T. N., Kopylova, V. P., and Chugunnaya, N. K.

TITLE: Determination of cerium in heat-resistant alloys and cast iron grades

PERIODICAL: Zavodskaya laboratoriya, v. 29, no. 3, 1963, 298

TEXT: A colorimetric determination of cerium in the form of peroxide compounds is impossible in the presence of iron and with Trilon B. Extraction of the cupronate with chloroform is therefore recommended for completely separating cerium from traces of Fe. 5-10 g nickel alloy (Cr-Ni-Fe) is dissolved in a mixture of hydrochloric and nitric acids, filled up with 25-50 ml  $H_2SO_4$  (1.84), and evaporated until  $SO_3$  vapors are formed. The solution is diluted. Chromium is oxidized with ammonium persulfate in the presence of silver nitrate, Al, Fe, and Ce hydroxides are precipitated with ammonia, the precipitation being repeated. The hydroxides are dissolved in hot saturated oxalic acid solution with addition of 1 ml 5% calcium chloride solution, and left standing overnight at pH 4-5. The oxalate precipitate is filtered off, washed out with 1%

Card 1/2

NAZARCHUK, T.N.; KOPYLOVA, V.P.; CHUGUNNAYA, N.K.

Determination of cerium in heat resistant alloys and cast  
irons. Zav.lab. 29 no.3:298 '63. (MIRA 16:2)

1. Institut metallokeramiki i spetsial'nykh splavov  
AN UkrSSR.

(Cerium—Analysis)  
(Heat resistant alloys)



KRICHER, N.I.; KOPYLOVA, V.P.

Pleistocene "frost" and "arid" wedges in the Lake Balkhash  
region. Biul. Kon. chetv. per. no.29:183-188 '64.  
(MIRA 17:8)

L 32619-66 EWT(m)/EWP(t)/ETI IJP(c) JD/JH

ACC NR: AP6012838

SOURCE CODE: UR/0080/66/039/004/0729/0735

AUTHOR: Samsonov, G. V.; Sinel'nikova, V. S.; Kopylova, V. P.

ORG: Institute of Materials Science Problems, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Aluminothermic reduction of titanium oxides

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 4, 1966, 729-735

TOPIC TAGS: chemical reduction, ~~aluminum~~, titanium oxide, ~~titanium dioxide~~, aluminum oxide, ~~aluminum compound~~ *titanium compound*

ABSTRACT: The conditions of reduction of titanium oxides ( $\text{TiO}_2$  and  $\text{TiO}$ ) by aluminum in a vacuum were studied in order to obtain titanium aluminides. The mechanism of the aluminothermic reduction was investigated by recording the corresponding thermograms for  $\text{TiO}_2$  and  $\text{TiO}$ . In order to determine the phase composition of the products, the reduction was carried out at various temperatures, including 975C (the only temperature at which a peak appeared on the thermograms), and the products were analyzed by x-ray diffraction and chemical means. The following conclusions were reached: the reduction of  $\text{TiO}_2$  by aluminum in a vacuum proceeds via the formation of  $\text{TiO}$  and  $\text{Al}_2\text{O}_3$ ; the formation of aluminum titanate

Card 1/2

UDC: 546.824'136

DEM'YANIKOV, I.G.; KOPYLOVA, Ye.A.; BEGIMOV, T.B.

Effect of phase constitution on the results of analysis by secondary  
X-ray spectra. Trudy Inst. met. i obog. AN Kazakh. SSR 10:105-109 '64.  
(MIRA 18:7)

DEM'YANIKOV, I.G.; KOPYLOVA, Ye.A.

Effect of various factors on the accuracy of determining iron  
in products of nonferrous metallurgy by secondary X-ray  
spectra. Trudy Inst.met.1 obog. AN Kazakh.SSR 11:215-219 '64.  
(MIRA 18:4)

KOPYLOVA, Ye.A.; RUBAN, N.N.; VINOGRADOVA, K.A.

The hydrolysis of vanadium oxychloride. Report no.1. Trudy Inst.  
met. i obog. AN Kazakh. SER 12:145-150 '65.

(MIRA 18:10)

ACCESSION NR: AP4045026

S/0191/64/000/009/0047/0049

AUTHOR: Ginzburg, B. M., Kopy\*lova, Ye. L.

TITLE: Temperature dependence of the mechanical properties of extruded Penton films

SOURCE: Plasticheskiye massy\*, no. 9, 1964, 47-49

TOPIC TAGS: bischloromethyloxacyclobutane, polymer strength, polymer elongation, polymer film, polymer extrusion, thermoplastic polymer, polymer viscosity, Penton, Pentoplast

ABSTRACT: A new thermoplastic material, Penton (polymer of 3,3-bis(chloromethyl)-oxacyclobutane), was investigated in the form of extruded films. First, however, the mol. weight was determined by the reduced viscosity of a 0.5% Penton solution in cyclohexanone at 293K. The viscosity of one batch was 2.53 dl/g (mol. wt. above 200,000) and that of the other was 0.93 dl/g (mol. wt. about 80,000). The films were extruded from granulated material at 483K, the temperature of granulation being 463K. The slight variation in viscosity of Penton during extrusion is tabulated. The temperature dependence of the yield point, tensile strength and relative elongation at break was then investigated over a temperature range of 193-438K. The thickness of the test strips was 0.05-0.10 mm and the experiments were carried out on a Schopper tester of the type FP-3.

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ACCESSION NR: AP4045026

Four temperature ranges can be distinguished on the basis of the curves shown in Fig. 1 of the Enclosure. At low temperatures, the mechanical properties change only slightly. In the second temperature range (275-300K), greater changes occur, especially for elongation. In the third temperature range (296 - 428K) the elongation increases considerably, almost linearly with temperature, but the yield point and strength decrease. Finally, over a temperature range of 423-438C, all the mechanical properties vary considerably. The temperature dependence of the mechanical properties of samples cut in the longitudinal and transverse directions was qualitatively the same. In the transverse direction, the brittleness temperature shifted toward higher temperatures ( $299 \pm 2K$ ), the strength decreased slightly and the elongation at break increased slightly near 423K. The temperature dependence of these properties for Penton plastics with a reduced viscosity of 0.9 dl/g showed the same characteristics in the extrusion direction. Great variation in the data for Penton plastics could only be found near the temperatures of brittleness and melting. Below these temperatures, the mechanical properties of the film are comparable to those of cast Penton, and above them, the properties are improved. "The authors are indebted to A. V. Kupfer for the initiation of this investigation, the supply of the polymer samples and valuable comments. They also thank A. V. Fedeyeva for participating in the evaluation of this work and V. A. Denisova for helping to carry out the experiments. Orig. art. has: 4 figures and 1 table.

Card 2/4

ACCESSION NR: AP4045026

ASSOCIATION: None

SUBMITTED: 00

ENCL: 01

SUB CODE: MT

NO REF SOV: 002

OTHER: 004

Card 3/4



KOPYLOVA, Z.A.; KAMOLIKOVA, T.L.; Prinimali uchastiye: ALABYSHEVA, S.I.;  
VASEVA, R.G.

Level of ascorbic acid in the blood in health subjects and in  
acute infections in Archangel. Vop.pit 21 no.4:66-71 J1-Ag '62.

MIRA 15:12)

1. Iz kafedry biokhimii (zav. - dotsent M.D.Kiverin) i  
infektsionnoy kliniki Arkhangel'skogo meditsinskogo instituta.  
(ASCORBIC ACID) (ARCHANGEL—COMMUNICABLE DISEASES)

KOPYLOVA, Z.A.; Prinimali uchastiye: Alabysheva, S.I.; BIRYUKOVA, L.V.;  
~~VASEVA~~, R.G.; TENIGINA, N.G.

Effect of vitamin C supplement on the level of ascorbic acid  
in the milk and blood of puerperants in Archangel. Vop. pit.  
21 no.6:56-60 N-D '62. (MIRA 17:5)

1. Iz kafedry biokhimii (zav. - dotsent M.D. Kiverin) Arkhangel'skogo  
meditsinskogo instituta.

KOPYLOVA-SVIRIDOVA, T. N., VOROBYEV, V. I., KHODOSOVA, I. A. (USSR).

Interaction of some Enzymes with Nucleic Acids.

report presented at the 5th Int'l.  
Biochemistry Congress, Moscow, 10-16 Aug. 1961

KOPYLOVA-SVIRIDOVA, T.N.; KHODOSOVA, I.A.; FRENKEL', S.Ya.; VOROB'YEV, V.I.

Conditions for the formation of artificial nucleoproteids.

Dokl.AN SSSR 145 no.6:1400-1403 Ag '62. (MIRA 15:8)

1. Institut tsitologii AN SSSR i Institut vysokomolekulyarnykh  
soyedineniy AN SSSR. Predstavleno akademikom V.A.Engel'gardtom.  
(NUCLEOPROTEINS)

KOEYLOVA-SVIRIDOVA, T.N.

Study of denaturation of deoxyribonucleoproteins. Report No. 1:  
Thermal DNA denaturation in a synthetic complex with ribonuclease.  
Biofizika 9 no. 1:13-17 '64. (MIRA 17:7)

1. Institut tsitologii AN SSSR, Leningrad.

KHAZANOV, Ye.I.; KOTLYAREVSKIY, I.L.; KOPYLOVA, V.P.; SHLAPKO, A.Ya.;  
BUTORIN, K.K.

Experimental extraction of calcium carbide by fusion from limestones  
of the Ust-Anga deposit of the Irkutsk Province. Trudy Vost.-Sib.  
fil. AN SSSR no.25:138-143 '60. (MIRA 13:9)  
(Calcium carbide)

KOPYLOVA, V.P.; NAZARCHUK, T.N.

Conditions accompanying the precipitation of titanium in the  
presence of trilon B. Ukr.khim.shur. 26 no.1:110-112 '60.  
(MIRA 13:5)

1. Institut metallokeramiki i spetsial'nykh splavov AN USSR.  
(Titanium--Analysis) (Acetic acid) (Cupferron)

S/073/60/026/001/016/021  
B004/B054

AUTHORS: Kopylova, V. P. and Nazarchuk, T. N.

TITLE: Study of the Conditions for Titanium Precipitation in the Presence of Trilon B

PERIODICAL: Ukrainskiy khimicheskii zhurnal, 1960, Vol. 26, No. 1, pp. 110-112

TEXT: As the presence of iron disturbs the precipitation of titanium done by means of copperon, it was suggested to mask it by Trilon B (Ref. 1). The present study attempts to check the effect of pH, the order of mixing of solutions, etc. on titanium precipitation by means of copperon. It was found that a complete separation of iron from titanium was impossible. At all pH and Ti : Trilon B ratios, part of the titanium remains in solution while the precipitate is contaminated by coprecipitated iron. There are 3 tables and 7 references: 1 Soviet, 2 US, 1 British, 1 Czechoslovakian, and 2 German.

Card 1/2



15.2240

27341  
S/080/61/034/009/003/0.6  
D204/D305

AUTHOR: Kopylova, V.P.

TITLE: Chemical stability of the carbides of the transition elements of Groups IV, V, and VI

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 9, 1961,  
1936 - 1939

TEXT: The object of the present paper is to present quantitative data on the chemical stability of the carbides of Ti, Zr, Hf, Nb, Ta, Mo, and W in contact with aqueous solutions of acids and alkalis. A weighed portion of 0.2 g of the finely pulverized sample was placed in a 100 ml. flask and treated with 50 ml. of the reagent. The mixtures were allowed to stand in the cold for 24 hours or boiled for 2 hours. After this insoluble residues were filtered off through a glass filter, washed and dried and weighed. According to Ya S. Umanskiy (Ref. 10: Karbidy tverdykh splavov, M., Metallurgizdat, 77, 1947) the chemical stability of the carbides

Card 1/2

KOPYLOVA, V. P.

PHASE I BOOK EXPLOITATION

9  
SOV/6030

Samsonov, G. V., Corresponding Member, Academy of Sciences UkrSSR; A. T. Pilipenko, Doctor of Chemical Sciences, Professor; T. N. Nazarchuk, Candidate of Chemical Sciences; O. I. Popova, Candidate of Chemical Sciences; and T. Ya. Kosolapova, V. A. Obolonchik, G. Kh. Kotlyar, L. N. Kuchay, V. P. Kopylova, G. T. Kabanik, A. Kh. Klibus, K. D. Modylevskaya, and S. V. Radzikovskaya.

Analiz tugoplavkikh soedineniy (Analysis of Refractory Compounds) Moscow, Metallurgizdat, 1962. 256 p. 3250 copies printed.

Ed.: Ye. A. Nikitina; Ed. of Publishing House: O. M. Kamayeva; Tech. Ed.: A. I. Karasev.

PURPOSE: This book is intended as a laboratory manual for personnel in plant laboratories of the machinery, chemical, and aircraft industries and scientific research institutes. It can also be used by chemistry students at universities and schools of higher education.

Card 1/4

Analysis of Refractory (Cont.)

SOV/6030

COVERAGE: The book contains data from the literature and from laboratory research on the chemical and mechanical properties, crystalline structure, chemical analysis, production, and industrial and other applications of silicon carbide and other refractory compounds. Methods of determining the basic components of refractory compounds (carbon, boron, nitrogen, and silicon) are reviewed and detailed methods for the chemical analysis of all presently known refractory compounds given. The authors are associated with the Institut metallokeramiki i spetsial'nykh splavov, AN SSSR (Institute of Powder Metallurgy and Special Alloys, Academy of Sciences USSR). No personalities are mentioned. There are 327 references: 175 Soviet and the remainder mainly English and German.

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Analysis of Refractory (Cont.)

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AVAILABLE: Library of Congress

SUBJECT: Metals and Metallurgy

Card 4/4

BN/pw/bmc  
10-30-62

SAMSONOV, G.V.; PILIPENKO, A.T., prof., doktor khim. nauk; NAZARCHUK, T.N., kand. khim. nauk; Primalni uchastiy: POPOVA, O.I., kand. khim. nauk; KOSOLAPOVA, T.Ya.; OBOLONCHIK, V.A.; KOTLYAR, G.Kh., mladshiy nauchnyy sotr.; KUCHAY, L.N.; KOPYLOVA, V.P.; KABANNIK, G.T.; KLIBUS, A.Kh.; MODYLEVSKAYA, K.D.; RADZIKOVSKAYA, S.V.; NIKITINA, Ye.A., red.; KAMAYEVA, O.M., red. izd-va; KARASEV, A.I., tekhn. red.

[Analysis of high-melting compounds] Analiz tugoplavkikh soedinenii.  
Moskva, Metallurgizdat, 1962. 256 p. (MIRA 15:7)

1. Chlen-korrespondent Akademii nauk USSR (for Samsonov).  
(Intermetallic compounds--Analysis)  
(Nonmetallic materials--Analysis)

KOPYLOVA, E. A.

1030 Luminescence method of determining zinc  
in industrial solutions of ammonium nitrate. *Int. J.*  
Korotkiy, S. I. Kiselev, E. A. Kiseleva, and  
A. V. Kiselev. *Dokl. Akad. Nauk SSSR* 1977  
191: 1030-1031.

The authors describe a method for determining zinc in industrial solutions of ammonium nitrate by the luminescence method. The method is based on the formation of a complex of zinc with a luminescent substance. The complex is then analyzed by the luminescence method. The method is simple and accurate. The results of the analysis are given in the table.

*Kopylova, Ye. K.*

KLENKOVA, M.V. prof.; SOLOV'YEV, V.F.; ARTYUNOVA, N.M.; POPOV, P.G.; YASTREBOVA, L.A.;  
BATURIN, V.P.; KOPYLOVA, Ye. K.; TEODOROVICH, G.I., redaktor; TOPCHYEV,  
A.V., akademik, redaktor; NIRONOV, S.I., akademik, redaktor; ALIYEV,  
M.M., redaktor; AKHMEDOV, G.A., redaktor; VARENTSOV, M.I., redaktor;  
DMITRIYEV, Ye. Ya., redaktor; DOLGOPOLOV, N.N., redaktor; IL'IN, A.A.,  
redaktor; MEKHTIYEV, Sh. F., redaktor; MOZESON, D.L., redaktor; PUSTO-  
VALOV, L.V., redaktor; FOMIN, A.V., redaktor; NOSOV, G.I., redaktor;  
KISHLEVA, A.A., tekhnicheskii redaktor

[Recent sediments of the Caspian Sea] Sovremennye osadki Kaspiiskogo  
moria: Moskva, Izd-vo Akademii nauk SSSR, 1956. 302 p. (MIRA 9:3)

1. Deystvitel'nyy chlen AN AzSSR (for Aliyev) 2. Chlen-korrespondent  
AN SSSR. (for Varentsov, Pustovalov) 3. Nachal'nik morskogo otryada  
Azerbaydzhanskoy neftyanoy ekspeditsii SOPS AN SSSR (for Klenova)  
(Caspian Sea)



✓ Geological outline of the southern and central Caspian Sea. V. P. Butyrin and A. A. Butyrina. Azerbaidzhan. Vol. 1. Part 1. Moscow, 1956. 272 pp.

NUZHIDIN, N.I.; KOPYLOVA, Ye.N.; NECHAYEV, I.A.

Cytological picture of the change in chromosomes in the case of  
propagation of closely related organisms. Trudy Inst.gen. no.20:127-  
149 '53. (MLBA 7:1)

(Fruit flies) (Inbreeding)

KOPYLOVA, Ye.N.

Effect of long continued gamma irradiation on the ovaries of mice.  
Izv. AN SSSR. Ser. biol. no.5:592-596 S-O '58. (MIRA 11:10)

1. Institut genetiki AN SSSR.

(GAMMA RAYS--PHYSIOLOGICAL EFFECT) (OVARIES)

17(10)

AUTHOR:

Kopylova, Ye. N.

SOV/20-124-4-58/67

TITLE:

The Effect of Chronic Gamma-Irradiation on the Blood of Mice  
(Vliyaniye khronicheskogo gamma-oblucheniya na krov' myshey)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 4, pp 930-932 (USSR)

ABSTRACT:

In practical work there often arises the necessity of establishing the permissible irradiation effect doses (Refs 1,2). Among the most characteristic disturbances that take place in the animal organism under the influence of ionizing radiation are the changes in the morphological blood pattern in the vascular system (Refs 3-15). There is no consensus of opinion on the degree of these changes with minor radiation doses of x-rays or gamma rays (Refs 6,11,12, as opposed to 1,4,5,8,9,13). The problem was topical enough to prompt the investigation under consideration. For the tests, C-57 strain mice (black) were used, which, over a period of one year, were exposed to radiation doses of 0.4, 0.2, 0.1 and 0.05 r daily for 6 days a week. Co<sup>60</sup> was used as a radiation source. The blood was taken from the caudal vein 3,6,9, and 12 months after irradiation. The total dosis is given in table 1. As shown by table 2, the initial number of leucocytes was practically equal in test animals and controls. Table 2 (in %) shows the leucocyte number changes, table 3

Card 1/2

The Effect of Chronic Gamma-Irradiation on the Blood of Mice SOV/20-124-4-58/67

the changes of the morphological elements of the white blood, and table 4 the hemoglobin quantity. These test results show that against the background of age changes in the controls that had developed towards the end of the test year in the form of leuco- and lymphopenia, a leucopoiesis-suppressing effect manifested itself in the mice chronically treated with small gamma-ray doses in the following way: daily dosis 0.05 r - after 3 months, 0.4~~r~~-after 4-6 months postirradiation. A daily dosis of 0.1 r results in a hyperregeneration of the cells of the white blood 1 year postirradiation. Under the test conditions prevailing in the investigation under consideration, the red blood remains unchanged.-There are 4 tables and 15 references, 4 of which are Soviet.

ASSOCIATION: Institut genetiki Akademii nauk SSSR  
(Institute of Genetics of the Academy of Sciences, USSR)  
PRESENTED: October 9, 1958, by T. D. Lysenko, Academician  
SUBMITTED: March 29, 1958

Card 2/2

KOPYLOVA, Ye.N.

Effect produced on mammals by chronic irradiation at low  
dosages. Trudy Inst. gen. no. 27:359-369 '60. (MIRA 13:12)

(GAMMA RAYS--PHYSIOLOGICAL EFFECT)

(OVARIES)

(BLOOD)

MUSTEL', P.I.; DYAD'KIN, Yu.D.; BOKIY, B.V.; KELL', L.N.; KOMAROV, V.B.;  
SEMEVSKIY, V.N.; BORISOV, D.F.; GOLOVIN, G.M.; USEVICH, I.V.;  
DUBRAVA, T.S.; SHABLYGIN, A.I.; ZOLTOLAREV, N.D.; GALAYEV, N.Z.;  
SIGACHEV, A.Ye.; PANENKOV, Yu.I.; SENUK, D.P.; KOPYLOVA, Ye.V.

Pavel Ivanovich Gorodetskii; an obituary. Gor zhur. no.5:77 My '60.  
(MIRA 14:3)  
(Gorodetskii, Pavel Ivanovich, 1902-1950)

ARODOSOVA, I. A., KOPYLOVA, SVIRILOVA, T. M., and VOROB'YEV, V. L.

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The article discusses several methods of measuring the lifetime of nonequilibrium charge carriers in semiconductors which were applied to the investigation of germanium at the Electrophysics Laboratory of the Physics Institute imeni P. N. Lebedev, Academy of Sciences USSR.

Methods for measuring the lifetime of charge carriers with the aid of injected excess carriers are divided into two groups: the photomethod, where the excess carriers are injected with the aid of light, and the pulse method, where the excess carriers are injected by means of an electric field. Each method has its own advantages depending on the conditions set up in the experiment.

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